

## COALITION TO FUND CPR

Marlene H. Dortch  
Secretary  
Federal Communications Commission  
445 12th Street, S.W.  
Washington, DC 20554

Re: WC Docket Nos. 18-143, 10-90 and 14-58  
Proposed Rule by FCC on 06/13/2018 ID: FCC-2018-0212-0002  
<https://www.fcc.gov/ecfs/filings>

Dear Secretary Dortch:

The undersigned, as part of the Coalition to Fund CPR, are writing to you regarding your impending action on September 26th, above dockets on the Uniendo a Puerto Rico Fund. We commend the FCC for addressing this matter.

The reason why we are involved in this proceeding is because our organizations were and continue to be impacted by the hurricanes disasters that occur in Puerto Rico in 2017. This time we make a final effort to ask you to support our recommendations on this matter. It is imperative for the commission to consider new facts.

Recently, Hurricane Dorian threatened to impact Puerto Rico. Fortunately, we fared better than our brothers in Bahamas and were able to escape its wrath. Although we escaped it, it was evidently clear that we were right with our initial recommendations. Dorian exposed, that although progress has been made by the government and the private telecommunications sectors, we still need further preparation. It demonstrated that we should have access to all the telecommunications technologies available to confront an atmospheric event like this one. There was consensus in the Puerto Rican media, that satellite technology was very important for preparation. They argued that this technology is not adequately available in the island. We agree. Prepositioned VSAT technology should be considered a critical telecommunications service and needs to be further deployed in critical facilities throughout the island.

We previously submitted comments on this proceeding, individually and as members of the Coalition. The Coalition to Fund CPR's proposal because it addresses the above. The Coalition fully support Caribbean Preparedness and Response, Inc. (CPR) initiative in Puerto Rico.

CPR is a not for profit organization that has developed and is in the process of building a satellite-based model for emergency telecommunication services. This model provides for backup services and business continuity in Puerto Rico and the Virgin Islands. This Coalition is an unprecedented initiative from some of the most important organizations in Puerto Rico and the largest and most

important Puerto Rican organizations in the Diaspora coming together to impact a very important policy issue that affects both communities in the continental US and Puerto Rico.

We agree with the Commission's assessment on the impact of the Hurricanes in the telecommunications industry on Puerto Rico. We strongly support the Commission's effort to help the industry in creating a more resilient telecommunications system that can better withstand future disaster. At the same time, we believe the Commission should fund innovative community efforts underway that would better prepare and strengthen Puerto Rico for a future disaster.

We respectfully ask you to consider the following recommendations:

1. Include locally based satellite telecommunications facilities in **stage one funding** (restoration), otherwise, the exclusion of this technology will hamper economic development, diversity and innovation, necessary to prepare and respond for a disaster.
2. Provide funding to include new entrants with exciting technology better able to withstand extreme weather and natural disasters (they were inadvertently excluded).
3. Provide **stage two** and later rounds of funding to new entrants. Specially, entrants with satellite facilities in Puerto Rico.
4. Allow for innovative, independent community based and multi sector emergency telecommunications networks to be eligible to participate in the funding process. (Like Caribbean Preparedness and Response, Inc. (CPR) centers.

### **Rationale and additional recommendations:**

The goal of our coalition is to help aid in the establishment of resilient and backup telecommunications infrastructure in Puerto Rico and the U.S. Virgin Islands, and to ensure the survivability of basic communications after a future natural or manmade disaster.

Indeed, Puerto Ricans and fellow residents of the Caribbean are all too familiar with the devastation created by hurricanes due to the region's susceptibility to these weather patterns. It is for these reasons that we must go beyond restoring legacy systems and utilize this as an opportunity to make critical investments in the underlying telecommunications infrastructure of the islands. These investments would be short lived unless we also create redundancies and backup systems to make our infrastructure more resilient. Indeed, we believe that Satellite technology can serve the most cost effective and deployable stop-gap solution to supply the islands' telecommunications necessities during times when the conventional infrastructure is compromised.

Further, we understand that the Commission should not exclude specific technologies. By remaining technology neutral, the Commission would incentivize healthy competition and innovation among applicants. We wholeheartedly agree with FCC Chairman Ajit Pai stated intention to put "Puerto Rico squarely on the map when it comes to digital innovation." As a result, we endorse Chairman Pai's vision and ask for the FCC's full support of the Coalition, which is a

model for emergency telecommunication services for backup and business continuity for Puerto Rico and the Virgin Islands.

### **Artificial Latency Threshold**

The coalition agrees with the comments filed by SES Americom, Inc. and 03b Limited on the potential that an artificial bandwidth threshold would undermine the reach and quality of broadband services particularly because systems with latencies higher than one hundred ms already support real-time broadband applications.

As written in the comments, “A latency threshold of 100 ms is arbitrary because it would not allow PR/USVI Fund applicants to access satellite connectivity that can support the same broadband applications that would otherwise be available via terrestrial infrastructure.” One notable example is SES’ services to Unalaska, Alaska to provide high-speed broadband through its GSO satellites, “... SES partnered with OptimERA to provide reliable GSO C-band capacity to deliver reliable and affordable internet connectivity ...” As SES notes in their comments, “many critical broadband-enabled applications are not latency sensitive, such as video streaming, web browsing, social media, and email, which also makes GSO connectivity an important option for supporting broadband service.”

As result, we recommend that the Commission consider that satellite-based communications networks for Puerto Rico should be designed so that they are not locked to either a geostationary satellite or a non-geostationary satellite. The reason for this key consideration is that each system brings its own inherent advantages as well as limitations. For example: non-geostationary satellites operate from a lower altitude and, thus, have the advantage of lower latency, which is important for services that are sensitive to signal delays. However, from a lower altitude these satellites appear to move across the sky, which means that at the present time, the more expensive tracking and/ or multi-beam antennas are necessary. Looking at the medium and long term they represent an attractive solution. As Chairman Pai stated in Puerto Rico, the island should consider this alternative.

Geostationary satellites, on the other hand, operate at higher altitudes so they involve higher latency levels. However, geostationary orbit satellites can provide wide-area coverage, and because they appear to be in a fixed location in the sky, low-cost antennas can be used. These satellites are currently the mainstay of space-based communications, particularly for broadcasting services -- which are insensitive to signal delays.

A communications network configured with the flexibility to leverage both types of systems will be robust for the greatest number of applications for Puerto Rico.

## **Eligible Entities**

If the Commission were to proceed with a process that utilizes a competitive proposal, as envisioned in the Notice, we respectfully submit the following additional suggestions to improve the process.

The Coalition would like to associate itself with comment by the Telecommunications Regulatory Board (TRB) of Puerto Rico in so far as the, “Commission should award funding to geographical areas smaller than municipalities.” Indeed, we must acknowledge the reality that Puerto Rico remains physically mostly rural and is subdivided into nine hundred barrios. In the wake of Hurricanes Irma and Maria it became apparent that there is a critical need for connectivity at the local level. The barrios and municipalities that were furthest away from the staging areas for support were left without communications capabilities.

The lack of communications in turn prevented emergency officials from being able to gauge the extent of the damage in those regions, which were also the communities that disproportionately contributed the most fatalities. It was in these barrios and municipalities that we saw inordinate delays in restoring basic resources, including connectivity to either mobile or wireline communications.

An inexpensive solution that needs to be established prior to the next catastrophe are VSAT satellite communications systems. Much in the way that mobile carriers ought to prepare before a hurricane through the dispersal of equipment and supplies necessary for restoration activities, we ought to have VSAT systems in place throughout these municipalities to ensure that an emergency communications network is online immediately after the natural disaster. Further, we ought to pair this connectivity with a system such as the proposed CPR Project, which would be based on a technology that is more resilient in the Caribbean’s atmosphere conditions.

## **Role of Municipalities**

Satellite broadband was the only reliable communications system in the aftermath of the hurricanes and should be fully implemented across the island, especially in rural and mountainous areas in order to build a truly resilient and connected Puerto Rico. In response to some of the comments, we recommend that the Fund allow for innovative, independent community based and multi sector telecommunications networks to be established.

## **ETC Designations**

The Coalition strongly recommends not to limit eligibility to those who currently hold Eligible Telecommunications Carrier (ETC) designations. Indeed, we believe that both the Commission and the Puerto Rico Telecommunications Regulatory Board (PRTRB) have a tremendous opportunity here. Both the FCC and the PRTRB can take actions to pursue innovative solutions or provide other means where non ETC entities can provide innovative approaches to develop resilient and sustainable solutions. At present, there are no satellite facilities based in Puerto Rico with an ETC designation. This approach can provide an opportunity for these local facilities to be part of and contribute to this effort.

It is necessary that the Commission allow for **local VSAT operators** willing to develop local facilities in Puerto Rico to be eligible for funding. Indeed, we understand the need to ensure the funding is utilized appropriately and for the intended purposes of the Uniendo a Puerto Rico Fund. This local entities have utilized a technology option that in many instances have proven to be better suited to withstand extreme weather and natural disasters. In sum, the Commission ought to provide funding for those new entrants in stage two that have satellite facilities in Puerto Rico.

### **Coalition to Fund CPR Signatories**

#### **Puerto Rico organizations**

1. League of Cooperatives of Puerto Rico- Rafael Beltrán
2. Puerto Rico Bible Society – Rev. Heriberto Martínez
3. Canovanas Emergency Management Center – Hommy Vázquez
4. Foundation for a Better Puerto Rico- Theresa Bishop
5. Rancho Culebra (rural farm)- Dennis Rivera
6. Caribbean Preparedness and Response, Inc. (CPR)- Dr. Marinés Aponte
7. Casa Pueblo (community-based organization)- Dr. Arturo Massol
8. Campo Rico Group Inc.- José L. Rodríguez

#### **US based Puerto Rican organizations**

9. National Puerto Rican Agenda – Nilda Ruiz
10. Aspira - Ronald Blackburn
11. Tech Latino-José Marquez
12. CASA - Jimmy Torres
13. New Jersey Puerto Rican Congress, Inc.- Lydia Valencia
14. Ibero American Action League- Angélica Pérez-Delgado
15. Centro Cívico de Amsterdam- Ladan Alomar

Cc: Ajit Pai, Chairman FCC  
Brendan Carr, Commissioner FCC  
Michael O’Rielly, Commissioner FCC  
Jessica Rosenworcel, Commissioner FCC  
Geoffrey Starks, Commissioner FCC  
Selected Members of Congress  
Wanda Vázquez Garced, Governor PR  
Glorimar Ripoll, CIIO PR  
Alexandra Fernández, Associate member Public Regulatory Commission PR  
Sandra Torres, President Telecommunications Regulatory Board PR